



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Handwritten initials

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/602,049

06/24/2003

Tetsuya Gorohata

116338

8139

25944

7590

08/04/2004

OLIFF & BERRIDGE, PLC

P.O. BOX 19928

ALEXANDRIA, VA 22320

EXAMINER

NGUYEN, TRAN N

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/602,049	Applicant(s) GOROHATA ET AL.	
	Examiner Tran N. Nguyen	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 14 June 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-5 is/are pending in the application.
4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☐ Claim(s) 1 is/are rejected.
7) ☐ Claim(s) 2 and 3 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restriction

The restriction filed on 6/30/04 is hereby withdrawn because a previous restriction, filed on 5/26/04. Therefore, the restriction of 6/30/04 is a duplicative copy and should be withdrawn.

The applicant elects claims 1-3, with traverse, on 6/14/02 is acknowledge.

The applicant's argument that group I, the structure claims 1-3, and group II, the method claims 4-5, are related and should not be a burden to the Examiner to prosecute both structure and method claimed inventions.

In response to the applicant's reasoning for traversing the election requirement, the two groups of claims are independently distinct in term of the process of making and the structure of the device. The fields of search for a method of making a device and for a structure of the device, i.e., the product, are not coextensive, and determinations of patentability for claims of a method of making a device and claims of the device's structure are different.

In the determinations of patentability for claims of a method of making a device, the fabrication process includes its sequential order of fabricating steps and/or tools used in these steps of forming the device are considered significant.

On the contrary, in the determinations of patentability for claims of the device's structure the limitations of device's elements and their structural relationships as well as their functional/operational relationships are considered significant. In other words, in the device claimed invention, or in a product-by-process feature of a device, the method of forming the device is not germane to the issue of patentability of the device itself. (*In re Thorpe*, 227 USPQ 964, 966.)

Therefore, The fields of search for a method of making a device and for a structure of the device, i.e., the product, are not coextensive and the consideration for patentabilities are different and independent. This is the reason why there are two different and separate classifications for the method of forming the lamination core and the lamination core structure.

Thus, the restriction, which is set forth in the previous Office Action, is deemed to be proper and hereby made FINAL.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over **JP No. 3118837** (hereafter **JP'837**) in view of **JP No. 310470** (hereafter **JP'47**).

As discussed in the present application's Related Prior Art in the Background of Invention, **JP'837** discloses a plurality of conductor segments, each of which having U-shaped, wherein legs of a pair of the nearly U-shaped conductor segments are inserted into an entrance of, and are projected from the opposite exits of, a pair of slots distant from each other by a magnet pole pitch of a rotor. Then, the projected legs are bent toward the circumferential direction of the rotor and are sequentially joined together. Therefore, the conductor segment having obliquely bent head portion; and obliquely bent projected end portions both in circumferential direction.

JP'837 substantially discloses the claimed invention; however, **JP'837** does not clearly disclose that the head oblique portions and end oblique portions are made circular-arch-shaped around an axis of said stator core.

JP'470, however, discloses that a projected end portion is welded with another project end portion adjacent along the radial direction and further a binding member is held between the two projected end portions adjacent with each other in the circumferential direction in order to stabilize their positions to form oblique head portions and oblique end portions are made circular-arch-shaped around an axis of said stator core for the purpose of enhancing the winding structure without increasing height being increased.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the **JP'837** in view of **JP'470** so that the conductor segment having obliquely

Art Unit: 2834

bent head portion; and obliquely bent projected end portions both in circumferential direction. Doing so would enhance the winding structure of the stator for compact winding without increasing the stator winding height.

- 2. Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over **JP'837** in view of **Asao (US 6525443)**.

JP'837 substantially discloses the claimed invention, except for the head oblique portions and end oblique portions are made circular-arch-shaped around an axis of said stator core.

Asao, however, teaches these features (as shown in figures 2-3) for the purpose of reducing the height of the winding for more compact stator structure.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the JP'837 in view of Asao so that the conductor segment having obliquely bent head portion; and obliquely bent projected end portions both in circumferential direction. Doing so would enhance the winding compact structure of the stator by reducing the height of the winding.

Allowable Subject Matter

Claims 2-3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

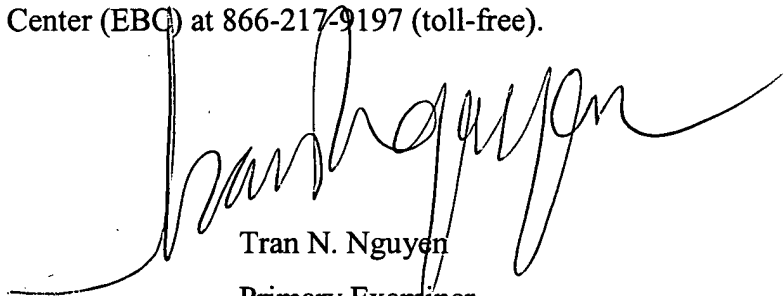
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N. Nguyen whose telephone number is (571) 272-2030. The examiner can normally be reached on M-F 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571)-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tran N. Nguyen', is written over the printed name and title.

Tran N. Nguyen
Primary Examiner
Art Unit 2834